

Jessica Forgety

Grade: third

Title: Crowing Cups-Sound

Date: 10/21/11

State Standards:

Science Standard 11 Motion

Grade Level Expectations	Checks for Understanding	State Performance Indicators
GLE 0307.11.3 Investigate how the pitch and volume of a sound can be changed.	0307.11.2 Use a variety of materials to produce sounds of different pitch and volume. 0307.11.3 Classify a variety of taped sounds according to their pitch and volume.	SPI 0307.11.3 Distinguish between pitch and volume. SPI 0307.11.4 Identify how sounds with different pitch and volume are produced.

Instructional Objectives:

The class will understand what pitch and volume is. Students will understand and classify sounds according to pitch and volume. Students will construct an instrument that will produce a crowing sound. They will understand how to manipulate the volume and pitch of the crowing sound. Students will watch a video which contains different sounds at different volumes and pitches.

Materials:

- AIMS, Energy Explorations: Sound, Light, and Heat pages 40-43
- 25 Student print outs of pages 42 and 43
- 30- 3oz. plastic cups
- 1 spool of yarn, or enough to cut 30-17 inch pieces
- 2 sponges
- 20 sheets of yellow construction paper
- 20 sheets of red construction paper
- 25 paper clips
- 60 googly eyes
- Scissors
- Tape or glue

- A pushpin
- Computer with projector or monitor in which all students can view video:
http://www.teachersdomain.org/asset/phy03_vid_collage/

Instructional Procedures:

Motivation: The teacher will give a brief overview of sound energy. The teacher will explain the concepts of pitch and volume. Students will be asked to place a finger on their throats and speak to feel the vibrations. Students will then be supplied with the materials needed for making their crows. The teacher will instruct students on how to make their crows-crow. Students will then be asked to manipulate the volume and pitch of the crows.

Key Question:

What makes the cup crow?

Classroom Strategies:

- The teacher will offer examples of pitch and volume.
- The teacher will show a video of pitch and volume sound classifications.
- The teacher will review how sound is energy.
- Crows cup instruments will be created.
- The teacher will engage students by asking key questions.
- The teacher will encourage students to manipulate the pitch and volume of their crow.
- The teacher will advise students to listen to other students' crows to determine differences in sound.
- The students will decorate their crows to personalize them.
- The teacher will encourage students to share their work and ideas with the class.

Learner Involvement:

- Students will analyze sound and classify sounds by the pitch and volume.
- Students will make their own sounds with their crow instruments.
- Students will answer questions pertaining to the pitch and volume of crow sounds.

Learning Environment:

- Students will work individually.
- Materials will be placed on desk after discussion of concepts.
- Students may share ideas and construction paper when constructing their crows.
- Students may discuss their ideas throughout interactive portion of the activity/lesson.

Closure:

Once finished, students will be given plastic bags to place their crows in so they can take them home. Students will be encouraged to share their crows with their families.

Alternative Supplies/Supplements:

Students can make eyes out of construction paper rather than use the googly eyes. Students can listen to additional sound clips. Students can discuss how and why the speakers of the computer are producing sound.

Evaluation:

Formal: The teacher will supply each student with page 43 from the AIMS book. Students will write their answers to each question and turn them in.

Informal: The teacher will walk around and observe the sounds students are making with their crows. The teacher will ask probing questions about the sounds the crows are making. Teacher will guide students through answering questions on page 43(AIMS) worksheet.